

REMARKS

Claims 1-15 and 24-26 are present in this application, and all claims stand rejected under 35 USC 103 over Ma et al., IEDM, **97**, 535-538 (1997) in view of Tahon et al., U.S. Patent No. 6,355,125.

This rejection is traversed. More specifically, with regard to claims 1-11, this rejection is traversed on the grounds that (a) neither Ma nor Tahon disclose a patterned metal foil as required by all of claims 1-11; and (b) Ma and Tahon cannot logically be combined in the manner suggested in the Office Action.

With regard to point (a), present claims 1-11 are directed to a backplane for use in an electro-optic display, the backplane comprising a patterned metal foil having a plurality of apertures extending therethrough, coated on at least one side with an insulating polymeric material and having a plurality of thin film electronic devices provided on the insulating polymeric material. It is noted that the Examiner now accepts that Ma does not disclose such a patterned film with multiple apertures, as stated in the first complete paragraph on page 3 of the Office Action. However, the Examiner states that Tahon does disclose such a patterned metal foil, directing attention to integers 2 and 8 in the drawing. With respect, it is entirely unclear on what basis the Examiner considers that integers 2 and 8 in Tahon are patterned metal foils. Integers 2 and 8 are specifically identified as substrates (see column 4, lines 1 and 2). These substrates may be metal foils, paper or polymeric films (Tahon, column 6, lines 11-12) but there is no suggestion that the substrate is provided with any apertures nor is there any logical reason why such a substrate should be so provided. It should be noted that the "apertures" adjacent the arrows in Tahon's drawing are not actually apertures but points at which various displays originally formed as part of a single mothersheet are separated from each other (see column 4, lines 11-19).

With regard to point (b), there is no logical way to combine Ma and Tahon. Ma describes a flexible backplane comprising a metal foil, a glass layer covering the metal foil and transistors formed on the glass layer. It is readily apparent that in this

structure it is the metal foil which provides mechanical integrity to the entire structure. Although integers 2 and 8 in Tahon are described as "substrates" they appear to support only the functional layers 3 and 9 respectively, the mechanical integrity of the display apparently being ensured mostly by the glass layers 1 and 7. In view of the very different functions of the metal foil in Ma and the substrates in Tahon, it cannot automatically be assumed that any of the features of Tahon's substrates can be transferred to the Ma metal foil.

Claims 12-15 also stand rejected as unpatentable under 35 USC 103 over Ma in view of Tahon. The Office Action states that Ma does not explicitly disclose that the patterned metal foil comprises at least one conductive via extending through the polymeric material, but that Tahon does disclose such a conductive via (attention being directed to column 6, line 8 to column 7, line 35 and Figure 1), and that it would be obvious to incorporate the Tahon via into the Ma backplane. This rejection is traversed on the grounds that (a) neither Ma nor Tahon disclose a via as required by claims 12-15; and (b) Ma and Tahon cannot logically be combined in the manner suggested in the Office Action.

Point (b) has already been discussed above. With regard to point (a), it is respectfully pointed out that the passage at column 6, line 8 to column 7, line 35 of Tahon does not mention a conductive via, and there is no integer in Tahon's Figure 1 identified as a conductive via. Indeed, it is unclear what purpose such a via could serve in the Tahon display. In the backplane claimed in present claims 12-15, the conductive via connects at least one of the thin film electronic devices to the metal foil. If, *arguendo*, a metal foil substrate 2 or 8 in Tahon is regarded as equivalent to the metal foil of the claimed backplane, it would appear that any conductive via would need to extend through an adjacent insulating layer, and the only such layer present in the Tahon display is the glass sheet 1 or 7. It is entirely unclear what the purpose of providing such a conductive via could be, since there are no electrical components present on the (outside) surface of the glass sheet 1 or 7 remote from the substrate 2 or 8 to which such a conductive via could

usefully extend. Accordingly, present claims 12-15 cannot be obvious over Ma and Tahon.

Claims 24-26 also stand rejected as unpatentable under 35 USC 103 over Ma in view of Tahon. The Office Action states that Ma does not explicitly disclose that the peripheral portion of the backplane has a plurality of apertures extending through the metal substrate, but that Tahon does disclose such a metal foil having a plurality of apertures extending therethrough (attention being directed to column 6, line 8 to column 7, line 35 and Figure 1), and that it would be obvious to incorporate the Tahon apertured film into the Ma backplane. This rejection is traversed on the grounds that (a) neither Ma nor Tahon disclose an apertured film as required by claims 24-26; and (b) Ma and Tahon cannot logically be combined in the manner suggested in the Office Action.

Point (b) has already been discussed above. With regard to point (a), it is respectfully pointed out that the passage at column 6, line 8 to column 7, line 35 of Tahon does not mention apertures provided around the periphery of either of the substrates 2, 8. Indeed, as discussed above with reference to the rejection of claims 1-11, Tahon does not disclose the presence of any apertures passing through the substrates 2, 8, and the apparent apertures adjacent the arrows in Tahon's Figure 1 are in fact divisions between separate displays produced from a common mothersheet. Accordingly, present claims 24-26 cannot be obvious over Ma and Tahon.

For the foregoing reasons, the 35 USC 103 rejections set out in the aforementioned Office Action are unjustified and should be withdrawn. Reconsideration and allowance of all claims remaining in this application is respectfully requested.

Since the normal period for responding to the Office Action expired July 13, a Petition for a two month extension of this period is filed herewith.

Kazlas et al.
Serial No. 10/707,184
Response to Office Action, September 7, 2006
Page 5

During the preparation of the present Response, the undersigned attorney has had occasion to review the question of the inventorship of this application and has realized that the amendments to the claims previously made in response to the election requirement do require a change in inventorship. Accordingly, an appropriate Petition is filed herewith.

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